



Mine Water Treatment System
ER RFP GK8-77
Evoqua Proposal 2015-99897

PREPARED FOR



Jan Rick
Environmental Restoration LLC
1666 Fabick Drive
St. Louis, MO 63026

PREPARED BY

Evoqua Water Technologies LLC
August 26, 2015

Curtis J. Wood
General Industry Sales Engineer
Tel: (303) 378-7253
Email: curtis.wood@evoqua.com



August 26, 2015

Jan Rick
Environmental Restoration LLC
1666 Fabick Drive
St. Louis, MO 63026

Dear Jan,

Evoqua Water Technologies LLC is pleased to present the following proposal in response to ER RFP GK8-77 for treating the drainage from the Gold King Mine in San Juan County, Colorado.

We have designed our proposal to be respectful of the emergency nature of the project and the uncertain conditions at the project site.

To meet the timing specified for proposal submission, we will provide onsite supervision of personnel supplied by customer for equipment unloading, installation and start up, as well as the first 28 days of operation as requested in the RFP. Evoqua has trained and experienced service technicians approximately two hours away who will be able to perform these services. We will also visit the site on a weekly basis after operation has been turned over to another party, and will be able to provide on call services as necessary and 24/7 telephone support.

Our proposed system will meet all of the customer's technical requirements for reduction of suspended solids and heavy metals in an efficient, easy-to-use manner. We are also providing the redundancy requested by having two trains of our equipment on site, as well as maintaining an onsite inventory of critical spare parts for expedited repairs.

We are prepared to mobilize our equipment and have personnel onsite as soon as we have your go ahead.

Due to the timing of the RFP and proposal due date, we have taken exceptions to many aspects of the RFP. Please let us know of any specific critical items that need to be negotiated.

Best Regards,

A handwritten signature in black ink, appearing to read "Curtis J. Wood". The signature is fluid and cursive, with the first name "Curtis" and last name "Wood" clearly distinguishable.

Curtis J. Wood

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Scope

Background

There is a waste stream emanating from the former Gold King mine site near Silverton, CO. This water is flowing at an average rate of 600 gpm and is laden with heavy metals that pose an environmental risk. The following describes our proposed process to treat this challenging water in a remote location. This equipment is mounted on mobile trailers and is ready for deployment on a rent and service basis.

The proposed system incorporates two independent trains, with each train having a nominal rated flow of 600 gpm (1000 gpm max.). The proposed system will provide significant reduction of the metal contaminants in the water and reduce the impact of this water on the environment.

PROCESS DESCRIPTION

1.0 CAUSTIC ADDITION AND AERATION

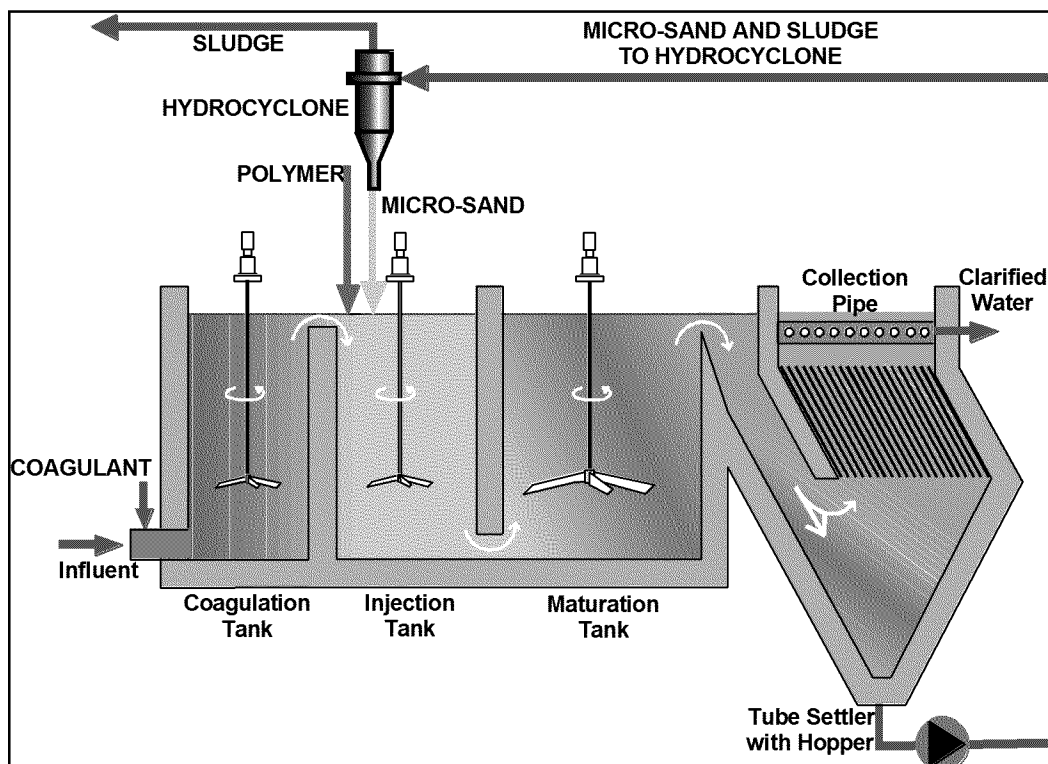
The proposed treatment process begins with air mixing and injection of sodium hydroxide to raise pH to 7 to 7.5. This will cause several reactions to occur:

- Precipitation of aluminum
- Precipitation of iron as iron hydroxide
- Co-precipitation of arsenic (V) with the iron hydroxide
- Some manganese may precipitate
- The hardness, copper, zinc and cadmium will remain mostly soluble at this pH and pass through the clarification process for later treatment
- TSS after precipitation is estimate to be in the range of 400-500 mg/liter based on data provided

Caustic injection and reaction will occur in a mix/aeration tank of 18,000 gallon capacity allowing for 10 minutes of reaction time. Treated water will gravity flow to clarification.

2.0 ACTIFLO® MOBILE CLARIFICATION

The ACTIFLO® process is a compact, high-performance water clarification system that combines the advantages of microsand enhanced flocculation with lamella tube settling. The addition of microsand serves as a flocculation aid and ballasting agent, allowing overflow rates as high as 30 gpm/ft² in water treatment applications. These high overflow rates result in system footprints that are between 5 and 25 times smaller than conventional clarification systems of similar capacity. ACTIFLO® treatment is accomplished through a series of consecutive process steps that consist of coagulation, microsand and polymer injection (injection), floc maturation (maturation), settling and sand recirculation.



PROCESS DESCRIPTION, cont.

2.1 Coagulation, Injection and Maturation Tanks

Chemical coagulant (alum, ferric, etc.) and possibly pH adjustment chemicals (such as acid or caustic) are added into the raw water piping prior to entering the coagulation tank. The raw water then enters the coagulation tank. Coagulant destabilizes the suspended solids and the colloidal matter in the influent stream. Efficient mixing is provided in the coagulation tank. This mixing thoroughly disperses the coagulant and the destabilized particles into the raw water over a hydraulic retention time of approximately two minutes. The destabilized particles collide and begin early stage floc formation.

The coagulated water then flows over a weir into the injection tank where flocculant aid polymer (polymer) and microsand are added to initiate floc formation. Here, the combination of flash mixing and a hydraulic retention time of approximately two minutes allow for thorough incorporation of microsand and polymer into the coagulated water. The combination of microsand and polymer serve as a “seed” for floc formation and development in the next process step.

ACTIFLO® treatment continues as water passes through the underflow passage from the injection tank into the maturation tank. Although chemical floc formation actually begins with the addition of polymer and microsand in the injection tank, the majority of ballasted floc formation occurs during the maturation process step. Gentle mixing and increased hydraulic retention time of approximately six minutes provide ideal conditions for the formation of polymer bridges between the microsand and the destabilized suspended solids. The large specific surface area of the microsand that provides enhanced opportunity for polymer bridging and enmeshment of microsand and floc already in suspension further augment this process.

2.2 Settling Tank

The fully formed ballasted floc leave the maturation tank and enter the settling tank. Here the ballasted flocs rapidly settle and are removed from the treated water via lamella settling. Here, laminar upflow through the lamella-settling zone provides rapid and effective removal of the microsand/sludge floc. Clarified water exits the ACTIFLO® system via a series of weirs and collection troughs for subsequent filtration, disinfecting and delivery to the distribution network.

2.3 Sand Recirculation System

The ballasted floc sand-sludge mixture is collected at the bottom of the settling tank and withdrawn using a rubber-lined centrifugal slurry pump. The sand-sludge mixture is then pumped to the hydrocyclones for separation. Energy from pumping is effectively converted to centrifugal forces within the body of the hydrocyclone causing chemical sludge to be separated from the higher density microsand. Once separated, the microsand is concentrated and discharged from the bottom of the hydrocyclone and re-injected into the ACTIFLO® process for re-use. The lighter density sludge is discharged out of the top of the hydrocyclone and sent for thickening or final disposal.

PROCESS DESCRIPTION, cont.

2.4 Sludge Handling

The light sludge is collected and thickened in an 18,000 gallon weir tank and transferred to customer for disposal by an air operated diaphragm pump. Sludge enters the process at about 1% solids and leaves and 2-4% solids. Decant water is pumped back to the feed of the system for recovery.

3.0 EQUALIZATION AND BAG FILTRATION

An equalization tank is provided to stabilize flow and allow transfer pumps to provide water under pressure to 1 micron nominal bag filters. Bag filters are needed to remove any carry-over from the clarification process and to protect SCU media downstream.

4.0 SCU™ MEDIA FOR DISSOLVED CATIONIC HEAVY METAL REDUCTION

Following bag filtration, tanks of SCU™ media are used for cationic metal removal. SCU™ is a proprietary granular carbonaceous adsorbent supplied in service exchange vessels for adsorption of transition metals from industrial wastewater, ground water and storm runoff water. SCU is similar in appearance to granular activated carbon but has a higher density and particle hardness. SCU selectively adsorbs dissolved metal cations including cadmium (Cd), trivalent chromium (Cr⁺³), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), and zinc (Zn) while allowing calcium (Ca) and magnesium (Mg) to pass through. Metals loading capacity of SCU depends on influent water quality and treatment system configuration.

Two stages of treatment will be used, with a lead tank removing the bulk of the dissolved metals and a lag tank polishing the effluent. Using lead / lag vessels allows running the lead tank to some metal leakage, which provides maximum capacity before the tank is replaced. Exhausted media is returned to Evoqua's Roseville, Minnesota facility for recovery of metals and disposal of the spent media.

5.0 ASG™ MEDIA FOR ARSENIC POLISHING

If the co-precipitation of arsenic with existing iron in the ACTIFLO® system does not result in meeting the arsenic discharge goal, an additional media step can be used. ASG™ (a titanium-based adsorptive media) can also be employed using separate pressure vessels or layered within the vessels supplied for the ASG™ media.

EQUIPMENT SCOPE OF SUPPLY

The proposed system includes the following equipment:

- One (1) portable eyewash. A 15 gallon pressurized vessel with standard eyewash connection and wash-down hose is included.
- One (1) inlet flow control station. Station consists of a schedule 80 PVC pipe manifold with two 6" inlet flanges, four automatic valves to accomplish block and divert function, two 6" divert flanges and a flow meter on common 8" outlet to monitor flow. The flow meter also provides signals for control of chemical injection systems.
- One (1) sodium hydroxide feed system. 25% sodium hydroxide will be injected upstream of the aeration/mix tank. Dose is estimated at 100-400 ppm on a 100% basis. Feed system includes three (3) 50% chemical pumps, containment and pH monitor. Caustic and bulk caustic storage is by others.
- One (1) mixing tank. An 18,000 gallon steel storage "frac" tank is included for mixing and aeration. This tank includes four (4) electric mixers to keep solids suspended.
- Four (4) air blowers. A separate air blower with eductor system provides fine bubble aeration to assist in oxidation of the iron. Each blower is rated to 85 CFM at 7 psig and feeds an educator placed in each corner of the mixing tank.
- Three (3) transfer pumps. (2) on-line, (1) standby. Each pump is capable of delivering 600 gpm at 32 psig and is powered by a 20HP electric motor. Pumps are individually skid mounted with motor starter enclosure.
- Two (2) Mobile Actiflo[®] Clarification Trailers. The Actiflo clarification system uses a sand-ballasted flocculation in order to clarify raw water at flow rates up to 1000 gpm in a single trailer. The Actiflo trailer is fully automated and includes a lab area with chemical (acid, caustic, or hypochlorite), and coagulant metering pumps, and polymer make-up and dosing systems. On-board coagulation, injection, and maturation tanks ensure adequate contact time with the chemicals and recirculated sludge and sand. A lamellar tube clarification section improves sludge separation from the effluent water. The Actiflo produces a continuous 20-25 gpm of sludge waste, at a concentration of 0.1-1%. A slow-acting proportional valve will be installed on the inlet to each Actiflo to maintain level in the mix tank.
- One (1) clarified water storage tank. An 18,000 gallon steel "frac" storage tank is included. This tank receives clarified water overflow from the mobile clarifier and includes a level transmitter.
- Two (2) transfer pumps. (1) on-line, (1) standby. Each pump is capable of delivering 600 gpm at 50 psig and 1200 gpm at 42 psig and is powered by a 50HP electric motor. A level control line with proportional valve will be used to circulate water back to the mix tank.
- Three (3) bag filters. Each filter is rated for up to 100 gpm flow and holds eight (8) filter bags that are 7" x 30" Inlet and outlet pressure gauges will allow the operator to check solids accumulation via differential pressure across the filters.

EQUIPMENT SCOPE OF SUPPLY, cont.

- Four (4) HP1020ST SCU™ Vessels for metals reduction. Each vessel is loaded with 13,370 pounds of SCU™ media over a carbon media under-bed (400 cubic feet total). These are single vessels with service piping on them (carbon slurry in/out, air release valve, rinse line). Attached is a typical drawing – rental assets may vary slightly. Two (2) trains of lead/lag. 600 GPM per train, minimum flow of 200 gpm/train. So in the event of low flow, one train would need to be taken off-line. We recommend an anti-siphon loop following media solution prior to discharge into creek to avoid draining last vessel of water during shutdown (potentially cause startup issues). During initial start-up, the SCU will require an initial low flow rinse-in period waste (~200 gpm per train). In this scenario, the water can be directed to effluent. Flow can then be increased to design. SCU beds should not be backwashed during operation.
- One (1) Solids tank. An 18,000 gallon steel “frac” tanks is provided with weirs to concentrate solids from the mobile clarifier. The last chamber of this tank contains clean water that will be circulated back to the system feed using dual 1 HP sump pumps. Sludge from this tank will be pumped using from the bottom for disposal by others. Two AOD pumps are provided for sludge transfer, which is a manual process.

- Instrumentation: The following is the complete list of instrumentation in the system.

Instrument	Feed	Product
Conductivity Monitor	Y	Y
Flow Totalizer	Y	N
Chlorine Analyzer	N	N
ORP Controller	N	N
pH Controller	Y	N
Silica Analyzer	N	N
Turbidity Monitor	Y	N

- Controls: A PLC based control system will monitor and control the equipment.
The following table itemizes what is included in the proposed control system:

Item	Included
All PLC devices and accessories	Y
Remote monitoring	N
Power distribution	N
Motor Control Center	N
Class-I, Div. II requirements	N

Note: Class-I, Div. II requirements are: air purged enclosures, instruments with intrinsically safe barriers, explosion proof motors/starters.

SPECIFIC EXCEPTIONS TO RFP# GK8-77WTP

- 2.1 Performance Specification
 - 2.1 project Schedule is offered as a good faith estimate
 - 2.1 Evoqua is supplying equipment and technical support only with installation by customer or others
 - 2.1 All power and utilities by customer or others
 - 2.1 Not all Evoqua employees will be OSHA compliant to work on hazardous waste sites
 - Evoqua will supply 4 weeks O&M service only
 - Evoqua will not agree to liquidated damages provision of \$5,000 per day
- 2.2 AARRs
 - General exception to comply with unknown Applicable, Relevant and Appropriate Regulations
- 3.0 Project Technical Requirements
 - Project schedule is offered as good faith estimate
 - Evoqua system is not self-contained – equipment should be sheltered in building or structure supplied by customer or others for weather protection
 - Materials do not comply with buy American act as this is a rental
- 3.4 Technical Proposal Requirements
 - Project schedule is offered as good faith estimate
 - Treatment chemical SDS will be provided upon award
 - 25% Caustic supply for pH control by customer or others
 - Percent reduction of constituents to be determined by on site testing and start-up
 - Evoqua will prefer ER management after initial start-up and O&M period
 - Evoqua system is not self-contained – equipment should be sheltered in building or structure supplied by customer or others for weather protection
 - All sludge handling dewatering and disposal will be by customer or others
 - Teaming partners to be identified upon award
 - Environmentally Friendly Practices/ Sustainability not applicable to Evoqua scope
- 4.0 Project Schedule
 - Project schedule is offered as good faith estimate
- 7.0 Project Terms and Conditions
 - Insufficient time to research State of Colorado requirements – no Professional Engineer stamp will be provided by Evoqua
 - Due to the denial of Evoqua's request for extension to submit a proposal in response to the Gold King Mine RFP, Evoqua has not had sufficient opportunity to review and provide a definitive response to the extensive list of federal regulations and other requirements included in the RFP that could have a substantial impact on the time or cost required for performance of work for this opportunity. Therefore, to the extent an award is made to Evoqua as a result of its proposal submission to the RFP, Evoqua will be in compliance with Section 44.403 of the FAR relating to commercial items and those

additional clauses as specifically listed in 52.244-6, Subcontracts for Commercial Items (OCT 2014) ONLY. No additional clauses beyond FAR 52.244-6 will be applicable to any contract, subcontract, purchase order, agreement or other contractual vehicle issued or awarded to Evoqua as a result of this proposal submission until Evoqua has been provided a reasonable period of time to review all requirements of the RFP, including the federal regulations, and are able to provide a complete and comprehensive response to those portions of the RFP applicable to the work anticipated to be performed by Evoqua.

- Evoqua is taking exception to supplied T&Cs and providing our standard as an alternative
- 8.0 Administrative / Project Specific
 - Flow Down Provisions – see above exception
 - Bonds – Not applicable to Evoqua scope of work
 - Permits – by customer or others
 - Lien Waivers – not applicable to Evoqua scope of work
- 8.1 Wages
 - Only applicable to direct Evoqua employees
- 8.2 Reports
 - Operation and maintenance reporting not applicable to Evoqua as O&M will be by others
- 11.0 Award of Contract
 - 11.i Subcontractor list will be submitted upon award
- 12.0 Payment Terms
 - Evoqua standard payment terms are net 30
- 12.1.5 Bond Cost
 - Performance and Payment Bond not applicable to Evoqua scope

Specific Scope by Customer:

- Secondary containment
- Site grading and any civil work
- Winterization and/or heat trace and insulation
- Generators and Fuel
- Instrument air
- Portable bathrooms
- Potable water and required safety showers
- Shelters/offices or similar
- Disposal of sludge and bag filters
- Area lighting
- Permits/PE stamps (if needed)
- Crane and/or forklift (needed to place equipment, media exchanges, and demobilization)
- Snow removal

EVOQUA RELEVANT EXPERIENCE

- Cascade Grain – Treatment of well water containing 40-60 ppm dissolved iron as pretreatment for Filtration/RO used for boiler feed water
 - Process included aeration, oxidation, mobile clarification, sludge thickening and dewatering
 - Duration – 6 months
 - Results – Iron levels consistently reduced to less than 1ppm
- Tucson Electric Power – Treatment of accumulated high TDS waste waters for recycle and reuse
 - Process included mobile clarification, filtration and RO
 - Duration 6 months
 - Results – 95% TDS reduction
- Plum Point Power Partners – Treatment of coal pile run off pond to prevent breach and discharge
 - Process included mobile clarification
 - Duration – 3 months
 - Results – TSS reduced from 400 ppm to less than 10 ppm – suitable for discharge
- Consol Energy – Treatment of long wall mining waste water pond for recycle and reuse
 - Process included mobile clarification, filtration and RO
 - Duration – two 6 month engagements
 - Results – 95% TDS reduction – treated water sold for fracing
- Mosaic – Treatment of low pH, high TDS Phosphate Mining/ Gyp Stack waste water for recycle, reuse and discharge
 - Results – Over 1 billion gallons successfully treated over several years

TENTATIVE PROJECT SCHEDULE

- Mobilization – Delivery of major components to job site: 7-10 days
- Installation – By others with Evoqua supervision: Estimated 2 weeks
- Start-Up and Commissioning : Estimated 4 weeks for full system optimization
- Operation and Maintenance: 4 weeks as per RFQ

ATTACHMENT A: FEED WATER DESIGN BASIS

Source: Waste water from abandoned gold mine

Constituent	Units	Result
Aluminum, Dissolved	µg/L	35000
Antimony, Dissolved	µg/L	0.5
Arsenic, Dissolved	µg/L	3.7
Barium, Dissolved	µg/L	8.9
Beryllium, Dissolved	µg/L	11
Cadmium, Dissolved	µg/L	65
Calcium, Dissolved	µg/L	380000
Chromium, Dissolved	µg/L	2.7
Cobalt, Dissolved	µg/L	110
Copper, Dissolved	µg/L	6000
Iron, Dissolved	µg/L	120000
Lead, Dissolved	µg/L	32
Magnesium, Dissolved	µg/L	33000
Manganese, Dissolved	µg/L	33000
Molybdenum, Dissolved	µg/L	0.84
Nickel, Dissolved	µg/L	72
Potassium, Dissolved	µg/L	2700
Selenium, Dissolved	µg/L	1.7
Silver, Dissolved	µg/L	0.1
Sodium, Dissolved	µg/L	3900
Thallium, Dissolved	µg/L	0.32
Vanadium, Dissolved	µg/L	2
Zinc, Dissolved	µg/L	25000
Aluminum	µg/L	38000
Antimony	µg/L	4.3
Arsenic	µg/L	49
Barium	µg/L	9.5
Beryllium	µg/L	11
Cadmium	µg/L	67
Calcium	µg/L	380000
Chromium	µg/L	5.7
Cobalt	µg/L	120
Copper	µg/L	6300
Iron	µg/L	190000
Lead	µg/L	51
Magnesium	µg/L	28000
Manganese	µg/L	34000
Mercury	µg/L	0.08
Molybdenum	µg/L	4.8
Nickel	µg/L	74
Potassium	µg/L	2900
Selenium	µg/L	2.5
Silver	µg/L	0.15
Sodium	µg/L	4000
Thallium	µg/L	0.33
Total Hardness	mg/L	1100
Total Suspended Solids	mg/L	66
Vanadium	µg/L	44
Zinc	µg/L	27000
pH	S.U.	2-3 (estimated)
Conductivity	µS/CM	TBD
Turbidity	NTU	TBD
Oil & grease	mg/L	0.0
Temperature	°F	TBD

Notes: Exceeding the above levels, and/or presence of unusual or anomalous constituents in the feed water, not identified in a typical water analysis, may require review and/or modifications to the proposed treatment system and/or charges.

ATTACHMENT B

PRODUCT WATER – QUANTITY

Parameter	Value
Flow Rate	600 gpm avg., 1200 gpm max.
Pressure	Gravity Flow
Availability	≥95%

PRODUCT WATER – QUALITY

Parameter	Value
TSS	TBD mg/L
Iron	TBD mg/L
Aluminum	TBD mg/L
Arsenic	TBD µg/L
Copper	TBD µg/L
Cadmium	TBD µg/L
Lead	TBD µg/L
Chromium (trivalent)	TBD µg/L
Mercury	TBD µg/L
Nickel	TBD µg/L
Zinc	TBD µg/L

While we believe our treatment technology will provide significant reductions in the constituents shown, Evoqua Water Technologies LLC is not guaranteeing any specific concentrations of treated contaminants. Laboratory study or pilot work is needed to determine specific performance.

ATTACHMENT C

UTILITY REQUIREMENTS

Assumptions

Customer is supplying 100' x 60' well-drained, level area with concrete or crushed gravel foundation capable of supporting Evoqua's equipment.

- Customer is supplying the following services to Evoqua's battery limit:

SERVICE	DISTANCE FROM EVOQUA	QTY	SIZE AND DESCRIPTION	PRESSURE OR VOLTAGE		FLOW OR AMPS	
Feed	10'	(2)	6" 150# Flange	20-40	psig	600 1200	gpm gpm (max.)
Product	10'	(2)	8" 150# Flange	<10	psig	575 1150	gpm gpm (max.)
Waste	10'	(1)	2" 150# Flange	<50	psig	5-10	gpm (est)
Potable Water	10'	(2)	1" NPT	20-50	psig	20	gpm, int.
Instrument Air	10'	(2)	½" NPT	80-100	psig	10	scfm, int.
Electrical (clarifier)	Note-1	(2)	60 Hz / 3 PH	480	VAC	100	Amp
Electrical (mix tank)	Note-1	(1)	60 Hz / 3 PH	480	VAC	100	Amp
Electrical (blower)	Note-1	(4)	60 Hz / 3 PH	480	VAC	20	Amp
Electrical (20HP)	Note-1	(3)	60 Hz / 3 PH	480	VAC	40	Amp
Electrical (50HP)	Note-1	(2)	60 Hz / 3 PH	480	VAC	100	Amp

Note-1: 480 VAC electrical service shall be supplied and terminated by the customer at the incoming side of the main disconnect switch on the clarifier, mix tank, blower and pump skid.

To ensure Evoqua operations personnel are not exposed to electrical arc flash hazards from the customer supplied electrical power, Evoqua requires that the arc flash hazard shall not exceed a category 2 as defined by NFPA70E at the point of connection to the Evoqua trailer/equipment. The cables from the customer supplied power source shall be considered in the calculation.

Amp flow shown is size of service connection for each device. Total running amp estimate: 300-400 at 480VAC, 3 PH.

ATTACHMENT D

SERVICE EXCLUSIONS

1. Utilization of union labor subject to prevailing wage determinations.
2. Soil borings, or other environmental sampling, for geotechnical evaluation.
3. Installation and equipment design beyond Seismic-0/1 zone standards.
4. Remote interface directly to Customer PLC, DCS or CAMM systems via hardwired contacts
5. Painting and/or coating of any piping and conduit materials.
6. All environmental and/or discharge-related applications, permits, surcharges, inspections, and associated fees.
7. All building and/or installation-related applications, permits, surcharges, inspections, and associated fees.
8. Delays and/or incurred costs due to inclement weather.
9. Exclusion of weekend or nationally recognized holiday work.
10. Off-site (outside Provider's battery limits) disposal of clearing grubbing spoil and surplus soils.
11. Development of temporary and/or permanent access roadways to and from Provider's battery limits.
12. Dewatering due to surface run-on and/or groundwater intrusion.
13. Hard excavation and/or blasting due to rock, boulders, or man-made obstructions.
14. Soil remediation (such as handling, testing, removal or disposal) due to hazardous waste and/or archaeological content.
15. Supply and installation of synthetic liners and/or geo-textile materials under building structures and/or tanks.
16. Supply and installation of double-wall contained piping systems.
17. Supply of installation of permanent stand-by electrical power generator system(s).
18. Supply and erection of temporary or permanent building/awning components.
19. Coating of concrete surfaces, other than for application of curing compounds.
20. Finish painting and/or coating of primed building structural components.
21. Supply of spare parts to Customer.
22. Provisions for complying with ADA (Americans with Disability Act), as Provider's facility will not be open to the public.
23. Installation requiring cold-weather materials and methods.
24. Construction and/or operational delays due to design changes during the installation phase.
25. Operational delay due to equipment malfunctions/delays during startup.

NOTE: Evoqua excludes all other items not specifically listed in "Evoqua Supplied" category.

ATTACHMENT E

PRICE SCHEDULE

MOBILIZATION CHARGES: \$551,826.00. Delivery of equipment and media to jobsite. Placement of trailer mounted equipment. Supervision labor for equipment placement and media loading. Off-loading crane/equipment provided by others (needed for equipment delivered on flat-bed trailers).

INSTALLATION CHARGES: \$66,800.00. This includes installation supervision labor and on-site set-up of loose ship items that attach to major assets. Supply and installation of interconnect pipe and electrical is by others.

START-UP CHARGES: \$39,000.00. This includes start-up supervision labor.

O&M LABOR: \$42,000.00. This includes 28 days of operation labor, 8 hours per day on-site.

WEEKLY SERVICE CHARGE: \$25,950 per week for a minimum of 4 weeks. This includes equipment rental, maintenance items, 24 hour phone support and weekly service visits. Weekly service charge begins 14 calendar days after arrival of major equipment.

DEMOBILIZATION CHARGES: \$104,165.00. This includes labor and freight for demobilization. Includes removal of media from vessels and washing of sludge from tanks. Customer is responsible for collecting, transporting, and disposing of wastes.

Evoqua to remove spent SCU™ media via vacuum equipment and place in supersacs on site for disposal by client. Pricing assumes media to be non-hazardous, additional fees can potentially apply if hazardous. Client to provide suitable fork truck and operator for duration of this operation. Client to properly dispose of spent media – this could be quoted by Evoqua pending site review

ADDITIONAL LABOR: Additional O&M labor or dispatched site support is an additional \$1,500.00 per day or dispatch event.

SCU™ MEDIA EXCHANGE: \$115,157.00. Includes labor, freight and material to exchange one SCU™ vessel (400 cubic feet). Client to provide suitable fork truck and operator for duration of this operation. Pricing assumes media to be non-hazardous, additional fees can potentially apply if hazardous. Client to properly dispose of spent media – this could be quoted by Evoqua pending site review.

For agreements exceeding one (1) year, pricing is subject to periodic adjustments based upon agreed price index escalation or changes to Provider's list price with thirty (30) days written notice to Customer.

The pricing contained herein is firm for a period of 30-days from date of proposal. This proposal, by Evoqua Water Technologies, LLC, is contingent upon several items including: (i) resolution of mutually acceptable payment terms; (ii) Evoqua satisfactory completion of an anti-corruption due diligence review; (iii) a written agreement specifically acknowledging acceptance of terms and conditions mutually agreed upon by the parties and (iv) subject to credit approval by Evoqua. Equipment is subject to availability. Pricing takes effect on the make water date or 10 days after equipment arrives at customer site (whichever comes first). Payment terms are Net 30.

EVOQUA WATER TECHNOLOGIES LLC STANDARD TERMS OF SALE

1. **Applicable Terms.** These terms govern the purchase and sale of equipment, products, related services, leased products, and media goods if any (collectively herein "Work"), referred to in Seller's proposal ("Seller's Documentation"). Whether these terms are included in an offer or an acceptance by Seller, such offer or acceptance is expressly conditioned on Buyer's assent to these terms. Seller rejects all additional or different terms in any of Buyer's forms or documents.
2. **Payment.** Buyer shall pay Seller the full purchase price as set forth in Seller's Documentation. Unless Seller's Documentation specifically provides otherwise, freight, storage, insurance and all taxes, levies, duties, tariffs, permits or license fees or other governmental charges relating to the Work or any incremental increases thereto shall be paid by Buyer. If Seller is required to pay any such charges, Buyer shall immediately reimburse Seller. If Buyer claims a tax or other exemption or direct payment permit, it shall provide Seller with a valid exemption certificate or permit and indemnify, defend and hold Seller harmless from any taxes, costs and penalties arising out of same. All payments are due within 30 days after receipt of invoice. Buyer shall be charged the lower of 1 ½% interest per month or the maximum legal rate on all amounts not received by the due date and shall pay all of Seller's reasonable costs (including attorneys' fees) of collecting amounts due but unpaid. All orders are subject to credit approval by Seller. Back charges without Seller's prior written approval shall not be accepted.
3. **Delivery.** Delivery of the Work shall be in material compliance with the schedule in Seller's Documentation. Unless Seller's Documentation provides otherwise, delivery terms are ExWorks Seller's factory (Incoterms 2010). Title to all Work shall pass upon receipt of payment for the Work under the respective invoice. Unless otherwise agreed to in writing by Seller, shipping dates are approximate only and Seller shall not be liable for any loss or expense (consequential or otherwise) incurred by Buyer or Buyer's customer if Seller fails to meet the specified delivery schedule.
4. **Ownership of Materials and Licenses.** All devices, designs (including drawings, plans and specifications), estimates, prices, notes, electronic data, software and other documents or information prepared or disclosed by Seller, and all related intellectual property rights, shall remain Seller's property. Seller grants Buyer a non-exclusive, non-transferable license to use any such material solely for Buyer's use of the Work. Buyer shall not disclose any such material to third parties without Seller's prior written consent. Buyer grants Seller a non-exclusive, non-transferable license to use Buyer's name and logo for marketing purposes, including but not limited to, press releases, marketing and promotional materials, and web site content.
5. **Changes.** Neither party shall implement any changes in the scope of Work described in Seller's Documentation without a mutually agreed upon change order. Any change to the scope of the Work, delivery schedule for the Work, any Force Majeure Event, any law, rule, regulation, order, code, standard or requirement which requires any change hereunder shall entitle Seller to an equitable adjustment in the price and time of performance.
6. **Force Majeure Event.** Neither Buyer nor Seller shall have any liability for any breach or delay (except for breach of payment obligations) caused by a Force Majeure Event. If a Force Majeure Event exceeds six (6) months in duration, the Seller shall have the right to terminate the Agreement without liability, upon fifteen (15) days written notice to Buyer, and shall be entitled to payment for work performed prior to the date of termination. "Force Majeure Event" shall mean events or circumstances that are beyond the affected party's control and could not reasonably have been easily avoided or overcome by the affected party and are not substantially attributable to the other party. Force Majeure Event may include, but is not limited to, the following circumstances or events: war, act of foreign enemies, terrorism, riot, strike, or lockout by persons other than by Seller or its sub-suppliers, natural catastrophes or (with respect to on-site work), unusual weather conditions.
7. **Warranty.** Subject to the following sentence, Seller warrants to Buyer that the (i) Work shall materially conform to the description in Seller's Documentation and shall be free from defects in material and workmanship and (ii) the Services shall be performed in a timely and workmanlike manner. Determination of suitability of treated water for any use by Buyer shall be the sole and exclusive responsibility of Buyer. The foregoing warranty shall not apply to any Work that is specified or otherwise demanded by Buyer and is not manufactured or selected by Seller, as to which (i) Seller hereby assigns to Buyer, to the extent assignable, any warranties made to Seller and (ii) Seller shall have no other liability to Buyer under warranty, tort or any other legal theory. The Seller warrants the Work, or any components thereof, through the earlier of (i) eighteen (18) months from delivery of the Work or (ii) twelve (12) months from initial operation of the Work or ninety (90) days from the performance of services (the "Warranty Period"). If Buyer gives Seller prompt written notice of breach of this warranty within the Warranty Period, Seller shall, at its sole option and as Buyer's sole and exclusive remedy, repair or replace the subject parts, re-perform the Service or refund the purchase price. Unless otherwise agreed to in writing by Seller, (i) Buyer shall be responsible for any labor required to gain access to the Work so that Seller can assess the available remedies and (ii) Buyer shall be responsible for all costs of installation of repaired or replaced Work. If Seller determines that any claimed breach is not, in fact, covered by this warranty, Buyer shall pay Seller its then customary charges for any repair or replacement made by Seller. Seller's warranty is conditioned on Buyer's (a) operating and maintaining the Work in accordance with

STANDARD TERMS OF SALE, cont.

Seller's instructions, (b) not making any unauthorized repairs or alterations, and (c) not being in default of any payment obligation to Seller. Seller's warranty does not cover (i) damage caused by chemical action or abrasive material, misuse or improper installation (unless installed by Seller) and (ii) media goods (such as, but not limited to, resin, membranes, or granular activated carbon media) once media goods are installed. THE WARRANTIES SET FORTH IN THIS SECTION 7 ARE THE SELLER'S SOLE AND EXCLUSIVE WARRANTIES AND ARE SUBJECT TO THE LIMITATION OF LIABILITY PROVISION BELOW. SELLER MAKES NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE.

8. **Indemnity.** Seller shall indemnify, defend and hold Buyer harmless from any claim, cause of action or liability incurred by Buyer as a result of third party claims for personal injury, death or damage to tangible property, to the extent caused by Seller's negligence. Seller shall have the sole authority to direct the defense of and settle any indemnified claim. Seller's indemnification is conditioned on Buyer (a) promptly, within the Warranty Period, notifying Seller of any claim, and (b) providing reasonable cooperation in the defense of any claim.

9. **Assignment.** Neither party may assign this Agreement, in whole or in part, nor any rights or obligations hereunder without the prior written consent of the other party; provided, however, the Seller may assign its rights and obligations under these terms to its affiliates or in connection with the sale or transfer of the Seller's business and Seller may grant a security interest in the Agreement and/or assign proceeds of the agreement without Buyer's consent.

10. **Termination.** Either party may terminate this agreement, upon issuance of a written notice of breach and a thirty (30) day cure period, for a material breach (including but not limited to, filing of bankruptcy, or failure to fulfill the material obligations of this agreement). If Buyer suspends an order without a change order for ninety (90) or more days, Seller may thereafter terminate this Agreement without liability, upon fifteen (15) days written notice to Buyer, and shall be entitled to payment for work performed, whether delivered or undelivered, prior to the date of termination.

11. **Dispute Resolution.** Seller and Buyer shall negotiate in good faith to resolve any dispute relating hereto. If, despite good faith efforts, the parties are unable to resolve a dispute or claim arising out of or relating to this Agreement or its breach, termination, enforcement, interpretation or validity, the parties will first seek to agree on a forum for mediation to be held in a mutually agreeable site. If the parties are unable to resolve the dispute through mediation, then *any dispute, claim or controversy arising out of or relating to this Agreement or the breach, termination, enforcement, interpretation or validity thereof, including the determination of the scope or applicability of this agreement to arbitrate, shall be determined by arbitration in Pittsburgh, Pennsylvania before three arbitrators* who are lawyers experienced in the discipline that is the subject of the dispute and shall be jointly selected by Seller and Buyer. *The arbitration shall be administered by JAMS pursuant to its Comprehensive Arbitration Rules and Procedures. The Arbitrators shall issue a reasoned decision* of a majority of the arbitrators, which shall be the decision of the panel. Judgment may be entered upon the arbitrators' decision in any court of competent jurisdiction. The substantially prevailing party as determined by the arbitrators shall be reimbursed by the other party for all costs, expenses and charges, including without limitation reasonable attorneys' fees, incurred by the prevailing party in connection with the arbitration. For any order shipped outside of the United States, any dispute shall be referred to and finally determined by the International Center for Dispute Resolution in accordance with the provisions of its International Arbitration Rules, enforceable under the New York Convention (Convention on the Recognition and Enforcement of Foreign Arbitral Awards) and the governing language shall be English.

12. **Export Compliance.** Buyer acknowledges that Seller is required to comply with applicable export laws and regulations relating to the sale, exportation, transfer, assignment, disposal and usage of the Work provided under this Agreement, including any export license requirements. Buyer agrees that such Work shall not at any time directly or indirectly be used, exported, sold, transferred, assigned or otherwise disposed of in a manner which will result in non-compliance with such applicable export laws and regulations. It shall be a condition of the continuing performance by Seller of its obligations hereunder that compliance with such export laws and regulations be maintained at all times. BUYER AGREES TO INDEMNIFY AND HOLD SELLER HARMLESS FROM ANY AND ALL COSTS, LIABILITIES, PENALTIES, SANCTIONS AND FINES RELATED TO NON-COMPLIANCE WITH APPLICABLE EXPORT LAWS AND REGULATIONS.

13. **LIMITATION OF LIABILITY.** NOTWITHSTANDING ANYTHING ELSE TO THE CONTRARY, SELLER SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, PUNITIVE OR OTHER INDIRECT DAMAGES, AND SELLER'S TOTAL LIABILITY ARISING AT ANY TIME FROM THE SALE OR USE OF THE WORK, INCLUDING WITHOUT LIMITATION ANY LIABILITY FOR ALL WARRANTY CLAIMS OR FOR ANY BREACH OR FAILURE TO PERFORM ANY OBLIGATION UNDER THE CONTRACT, SHALL NOT EXCEED THE PURCHASE PRICE PAID FOR THE WORK. THESE LIMITATIONS APPLY WHETHER THE LIABILITY IS BASED ON CONTRACT, TORT, STRICT LIABILITY OR ANY OTHER THEORY.

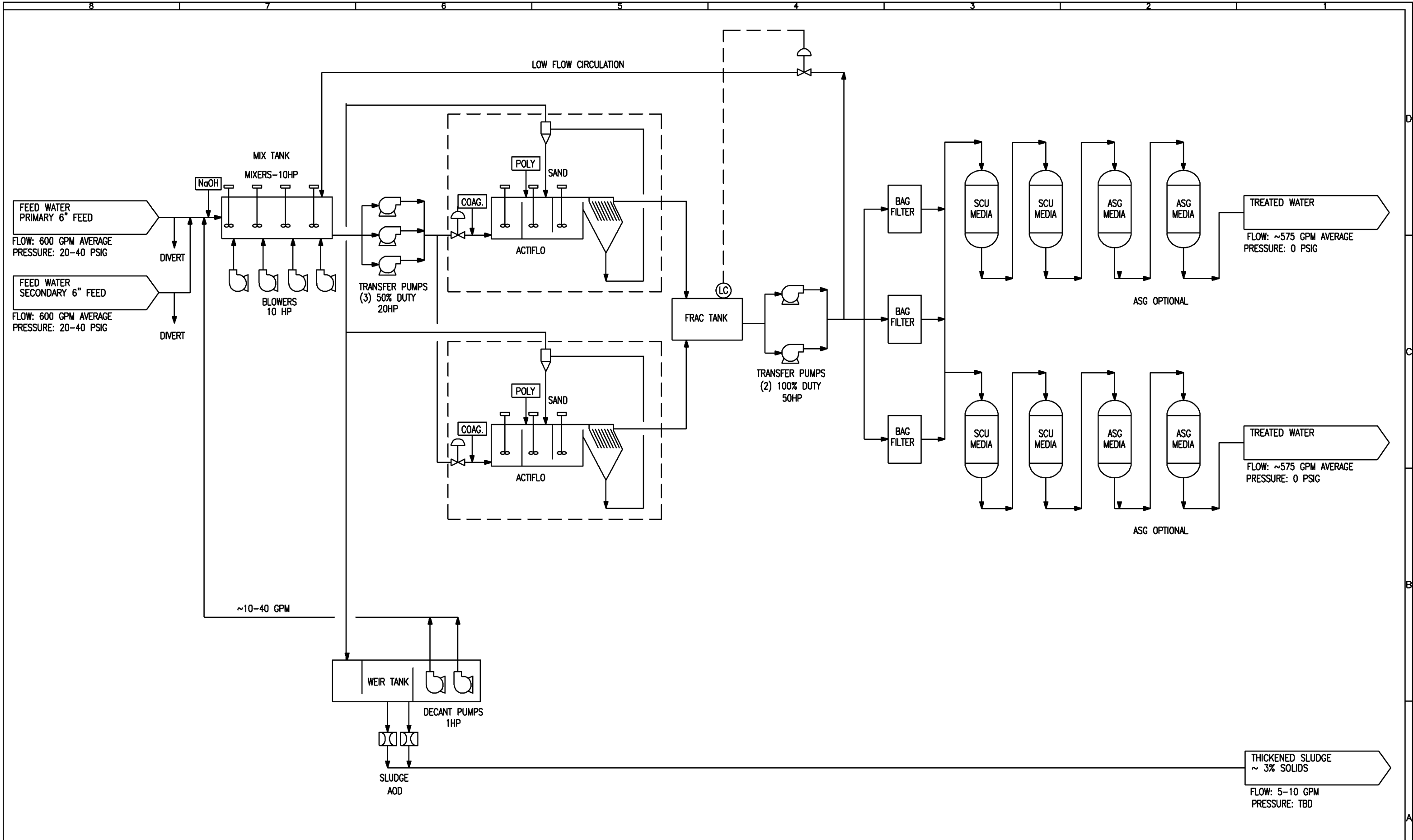
STANDARD TERMS OF SALE, cont.


14. **Rental Equipment / Services.** Any leased or rented equipment ("Leased Equipment") provided by Seller shall at all times be the property of Seller with the exception of certain miscellaneous installation materials purchased by the Buyer, and no right or property interest is transferred to the Buyer, except the right to use any such Leased Equipment as provided herein. Buyer agrees that it shall not pledge, lend, or create a security interest in, part with possession of, or relocate the Leased Equipment. Buyer shall be responsible to maintain the Leased Equipment in good and efficient working order. At the end of the initial term specified in the order, the terms shall automatically renew for the identical period unless canceled in writing by Buyer or Seller not sooner than three (3) months nor later than one (1) month from termination of the initial order or any renewal terms. Upon any renewal, Seller shall have the right to issue notice of increased pricing which shall be effective for any renewed terms unless Buyer objects in writing within fifteen (15) days of issuance of said notice. If Buyer timely cancels service in writing prior to the end of the initial or any renewal term this shall not relieve Buyer of its obligations under the order for the monthly rental service charge which shall continue to be due and owing. Upon the expiration or termination of this Agreement, Buyer shall promptly make any Leased Equipment available to Seller for removal. Buyer hereby agrees that it shall grant Seller access to the Leased Equipment location and shall permit Seller to take possession of and remove the Leased Equipment without resort to legal process and hereby releases Seller from any claim or right of action for trespass or damages caused by reason of such entry and removal.

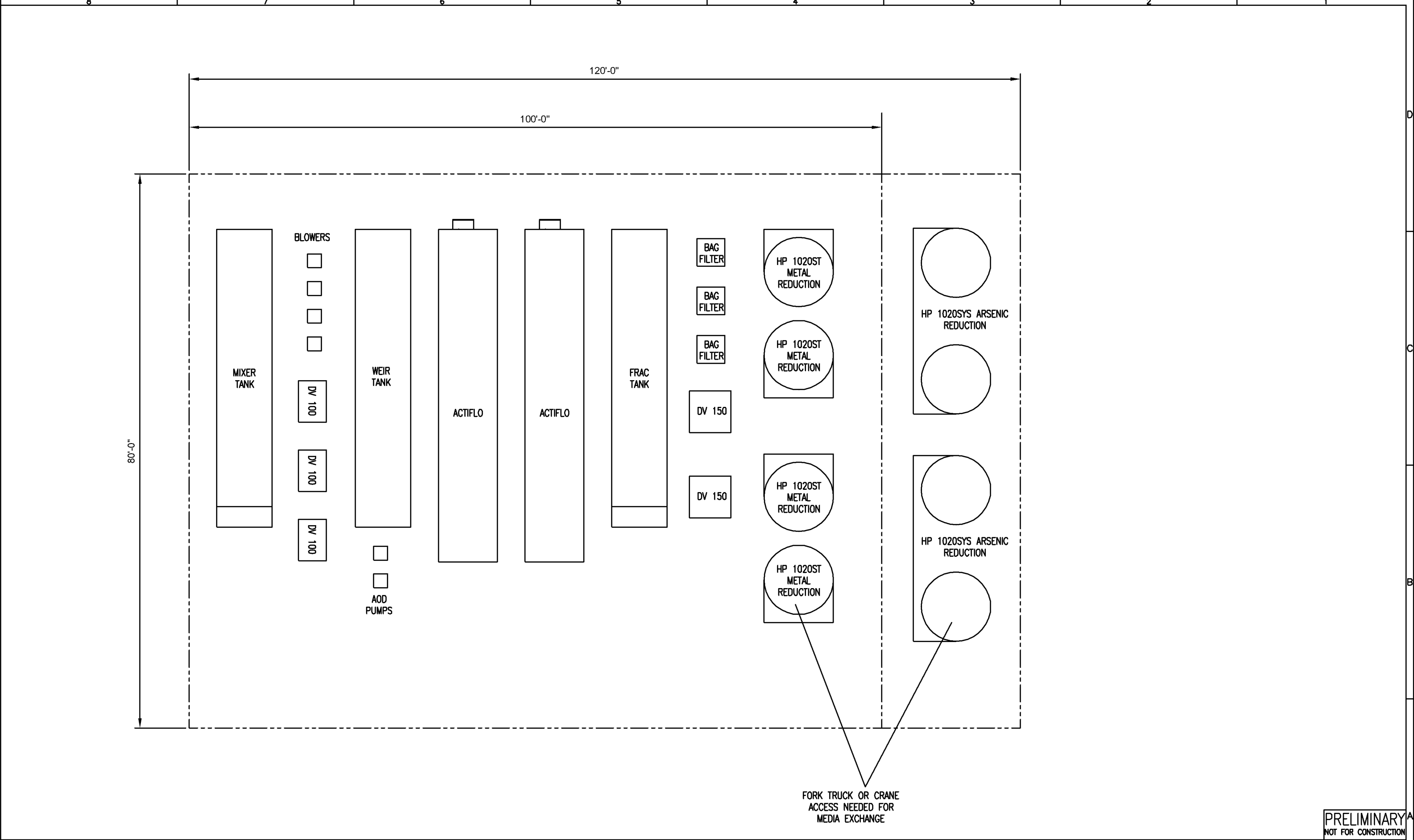
15. **Miscellaneous.** These terms, together with any Contract Documents issued or signed by the Seller, comprise the complete and exclusive statement of the agreement between the parties (the "Agreement") and supersede any terms contained in Buyer's documents, unless separately signed by Seller. No part of the Agreement may be changed or cancelled except by a written document signed by Seller and Buyer. No course of dealing or performance, usage of trade or failure to enforce any term shall be used to modify the Agreement. To the extent the Agreement is considered a subcontract under Buyer's prime contract with an agency of the United States government, in case of Federal Acquisition Regulations (FARs) flow down terms, Seller will be in compliance with Section 44.403 of the FAR relating to commercial items and those additional clauses as specifically listed in 52.244-6, Subcontracts for Commercial Items (OCT 2014). If any of these terms is unenforceable, such term shall be limited only to the extent necessary to make it enforceable, and all other terms shall remain in full force and effect. The Agreement shall be governed by the laws of the Commonwealth of Pennsylvania without regard to its conflict of laws provisions. Both Buyer and Seller reject the applicability of the United Nations Convention on Contracts for the international sales of goods to the relationship between the parties and to all transactions arising from said relationship.

ATTACHMENTS

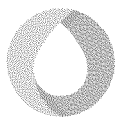
- Process Flow Diagram
- Plot Plan
- Actiflo Trailer
- SCU Media
- ASG Media
- Experience Ratio Letter



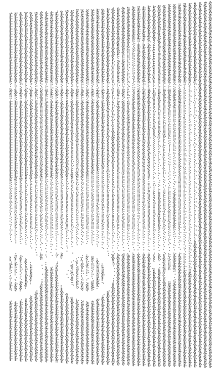
<div>BORDER: 24X360<div></div>BAR = 1" AT PLOT SCALE</div> <div>INTL REF:</div>		<div>COMPANY CONFIDENTIAL</div> <div>DOCUMENT AND ALL INFORMATION CONTAINED HEREIN ARE THE PROPERTY OF EVOQUA AND/OR ITS AFFILIATES. THE DESIGN CONCEPTS AND INFORMATION CONTAINED HEREIN ARE PROPRIETARY TO EVOQUA AND ARE NOT TO BE DISCLOSED, REPRODUCED, COPIED, LOANED, OR USED IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF EVOQUA. IN NO EVENT SHALL THEY BE USED IN ANY MANNER DETRIMENTAL TO THE INTEREST OF EVOQUA. ALL PATENT RIGHTS ARE RESERVED. UPON THE DEMAND OF EVOQUA, THIS DOCUMENT, ALONG WITH ALL COPIES AND EXTRACTS, AND ALL RELATED NOTES AND ANALYSES, MUST BE RETURNED TO EVOQUA OR DESTROYED, AS INSTRUCTED BY EVOQUA. ACCEPTANCE OF THE DELIVERY OF THIS DOCUMENT CONSTITUTES AGREEMENT TO THESE TERMS.</div>					DESIGNER	DATE	TITLE	PROCESS FLOW DIAGRAM MINE WASTE REMEDIATION			
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							CHECKER	DATE	CLIENT	ER - EPA GOLD KING MINE - NEAR DURANGO, CO			
							ENGINEER	DATE					
JSC	8/7/15	<div><div></div><div>WATER TECHNOLOGIES SCHAUMBURG, IL 847-805-1155</div></div>											
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				A INITIAL RELEASE										



evoqua
WATER TECHNOLOGIES



Mobile Actiflo® c l A r i f i c A t i o n S y S t e M

Evoqua Water Technologies provides the best in mobile clarification featuring the ACTIFLO® system, which uses a Kruger Inc. technology. This self-contained trailer-mounted system is capable of treating highly turbid water (up to 1000 NTU). The system produces extraordinarily clear effluent (1.0–2.0 NTU) with remarkable stability under varying raw water conditions.

The patented process used in the ACTIFLO system uses microsand as a seed to enhance floc formation and increase settling rate. The microsand promotes production of higher quality effluent than other types of clarification systems, and is ideally suited for treatment of raw water that is traditionally difficult to treat such as:

- Very high or low turbidity
- High color / TOC
- Cold water
- High algae

Its stability, ease of operation and small footprint make the clarifier trailer ideal for clarifying 750 gpm of raw water, reclaimed water or secondary effluent.

The system provides clear water for further processing or discharge in even the most demanding conditions.

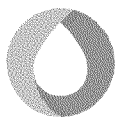
Mobile systems contain instrumentation and equipment for a fully automated and monitored operation. Chemical feed skids and fail-safe shut down controls are also included to ensure efficient and reliable operation.

When using Evoqua mobile systems, we guarantee quality, quantity and cost of treated water. All mobile equipment is backed with an inventory of standard critical components. Our skilled service team is on call 24-hours per day to meet your needs.

Call Evoqua for your water treatment requirements. We have over 80 local service facilities across the United States and Canada, ready to meet your needs.

Mobile Systems Provide Reliable Service for:

- Temporary or long-term water treatment requirements
- Pilot plant operations on various water streams
- Treatment for seasonal peaks or scheduled maintenance
- On-site operational expertise



SCU™ Specialty trace Metals reMOval Media

FOR remOval OF tranSitiOn metaISFrOm inDuStrial waStewater,
grOunDwater, anDStOrmwater runOFF

Description

SCU™ specialty media is a proprietary adsorbent which is similar in appearance to granular activated carbon or anthracite but with a higher density and particle hardness. It removes trace levels of various heavy metals from complex waters to levels not possible with standard ion exchange resins.

Ion exchange has historically been a proven technology to achieve metals discharge standards but in most cases has difficulty in achieving effluent levels below 25 ppb, depending on the contaminant and chemistry of the water. With many industries facing new, stricter metals discharge levels, Evoqua Water Technologies has developed SCU specialty media. This new class of adsorbent can routinely achieve effluent levels below 1 ppb for most metals and can achieve levels below 12 ppt (the current US regulation standard for discharge into the environment) for mercury.

appliCa tions

SCU specialty media has been successfully used in a number of applications:

- Industrial Wastewater
- Groundwater Remediation
- Stormwater Runoff

Metals removed by SCU specialty media include the following:

- | | |
|----------------------|-----------|
| • Cadmium | • Mercury |
| • Trivalent Chromium | • Nickel |
| • Copper | • Zinc |
| • Lead | |

Service and Disposal Options

To apply SCU specialty media, Evoqua offers integrated treatment alternatives which include the option of permanent or temporary exchange vessels/systems. Our service exchange approach integrates equipment and service combinations, thereby minimizing the customer's capital investment and reducing overall space requirements. Service exchange provides the ultimate flexibility to add or remove treatment capacity as your business grows or compliance limits change. This option also saves valuable manufacturing space while minimizing your maintenance and installation requirements.

Once exhausted, spent SCU specialty media can be transferred to Evoqua RCRA licensed central treatment and processing facility where both non-hazardous and hazardous wastes are treated in compliance with all state and federal guidelines and valuable metals are recycled into raw materials when possible.

Features and Benefits:

- Trace metals removal possible to ppb / ppt levels
- Applications fully supported by Evoqua laboratory facilities to evaluate and tailor specific solutions to each metals removal application
- Standard SCU™ specialty media system designs for flows from 1 to 5,000 gpm and higher
- SCU specialty media technology is simple to install and operate
- Service based offerings reduce capital investment required
- Full service capabilities for spent media exchange and disposal available

Chemical Properties

Form (as shipped)	Irregularly shaped, granular
Typical metals capacity (lb./ft. ³)	1.5 - 2.5 lb. / cu. ft.

Physical Properties

Particle size	10 X 30 mesh / 600 X 2000 mm
Bulk density (lb./ft. ³)	39 – 45

Operating Conditions

Operating pH range	5 to 11
Typical service flow rate (gpm/ft. ³)	1.0-2.2
Maximum operating temperature	120 °F



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SCU is a trademark of Evoqua, its subsidiaries or affiliates, in some countries.

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EVOQUA WATER TECHNOLOGIES NORTH AMERICA SERVICE NETWORK

Specifications

Design Capacity	1 MGD, design 1.5 MGD, max
Dimensions	48' x 8'6" x 13'6"
Operating Weight	95,000 lbs.
Coagulation Tank @ design	1.7 minutes
Injection Tank	1.7 minutes
Maturation Tank	6.0 minutes
Settling Tank Load Rate @ design	30 gpm/ft ²
Electrical Connections	480 VAC, 3 ph, 100 amp

Mechanical Connections	8" flange inlet 10" flange outlet 4" flange drain
Instrument-Influent	Raw water turbidity meter Raw water pH meter Raw water flow meter Coagulated water pH meter
Instrument-Effluent	Clarified water turbidity meter
Control Panel-PLC-based	NEMA 12 UL label Operator interface display Signal isolators Surge protectors Circuit breakers I/O terminal strips



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ACTIFLO is a trademark of Kruger, Inc.

All information presented herein is believed reliable and in accordance with accepted engineering practices. Evoqua makes no warranties as to the completeness of this information. Users are responsible for evaluating individual product suitability for specific applications. Evoqua assumes no liability whatsoever for any special, indirect or consequential damages arising from the sale, resale or misuse of its products.

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ASG Adsorbent Media

Description:

ASG is an NSF-approved granular arsenic adsorbent supplied in service exchange vessels for adsorption of metals from drinking water, industrial wastewater, contaminated ground water and storm water runoff. While its primary application is removal of arsenic from these waters, it has also been shown to remove antimony, cadmium, copper, lead, vanadium, and zinc. ASG removes As(III) and As(V) species.

The number and size of service vessels needed depend on influent flow rate, influent contaminant concentration, and effluent requirements. Service vessels are available in several sizes to accommodate a wide range of flow rates. Influent pretreatment may be necessary for efficient and effective use. Examples of pretreatment include pH adjustment and filtration. Service exchange vessels and media must be protected from freezing during shipment to prevent damage to the vessel and its internal components.

ASG tightly binds adsorbed arsenic, however, the user is responsible to evaluate spent media according to federal, state and local regulations to determine whether classification as hazardous waste warranted. If so, the spent media must be handled in accordance with applicable environmental protection regulations.

Chemical Properties

Form (as shipped)	White to off-white granules
Water Solubility	Insoluble
Typical Capacity	Dependent on inlet concentration, pH and other factors. Siemens can estimate capacity based on water quality analysis.

Physical Properties

Particle Size	16 X 60 mesh / 250 X 1190 micron
Media Density	40-45 lb / cu.ft.

Operating Conditions

Operating pH Range	4 to 10
Typical Service Flow Rate	1.5 - 2.0 gpm / cu.ft.
Empty Bed Contact Time (EBCT)	3.5 - 5 minutes
Maximum Operating Temperature	120°F (limitation of service vessel)

Note: Periodic backwash may be needed during operation if excessive pressure drop develops.



James Voltz
Managing Director

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July 02, 2014

Donna Reed
Director of Risk Management

Evoqua Water Technologies
355 S. Teller St, Suite 200
Lakewood, CO 80226-7387

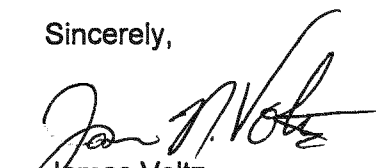
Dear Donna,

Currently Evoqua Water Technologies, EWT III Holding CORP, has an experience modification rating of 1.00. This operation, while transacting business for many years under the Siemen name, does not qualify for an experience rating calculation at this time due to the ownership change of January 15, 2014.

In order to have a calculation performed by the NCCI, three years of developed loss information under the current ownership must be available. Absent this information, the NCCI applies an experience modification of 1.00. Once three years of creditable loss information has been established in the summer of 2018, the experience modification factor for Evoqua will be calculated and published.

Hopefully this answers your question but if not please let me know.

Sincerely,



James Voltz
Managing Director